

Regioselective synthesis of 1,2,3-triazolyl derivatives of calix[4]arenes based on 1,3-dipolar cycloaddition

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Abstract

Regioselective synthesis of 1,2,3-triazolyl derivatives of calix[4]arenes based on the 1,3-dipolar cycloaddition of substituted benzyl azides to tetra(propargyloxy)calix[4]arenes in the presence of copper iodide was carried out. The presence of the p-methoxybenzyl substituent in the triazole ring leads to a dramatic (more than tenfold) increase in the fluorescence of the corresponding macrocycle in a region of 290-310 nm. © 2013 Springer Science+Business Media New York.

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Keywords

1,2,3-triazoles, 1,3-dipolar cycloaddition, benzyl azides, calix[4]arenes, fluorescence